

EXCURSION

WHICHER RANGE—DONNYBROOK SUNKLANDS

On October 9 - 11, 1976, a party of 15 Naturalists' Club members and four guests visited the Donnybrook Sunklands in order to expand on the survey work previously published by the Forests Department of Western Australia in its report, *Afforestation with Pines in the Donnybrook Sunklands—Statement of Intent*, September 1975. Specifically the party wished to consider the suitability of the boundaries proposed for the Whicher Range Reserve.

In its *Statement of Intent* the Department divided up the Sunklands area (State Forest No. 33) into three categories—reservations, proposed pine plantation cells and native hardwood areas. An account of this future management scheme of the Sunklands, with a map and colour illustrations, was given in the Department's periodical *Forest Focus*, No. 16, December 1975, 15 pp., which is, perhaps, more generally available than the *Statement* itself.

The proposed pine areas had been selected following soil and site surveys and consist mainly of the deep sandy soil preferred for pine planting. The area retained as native hardwood forest will be managed by normal forestry techniques, including prescribed burning. The "reservations" include areas set aside primarily for recreation or for biological purposes. One of these is the Whicher Range, selected to preserve a major occurrence of the Mountain Marri (*Eucalyptus haematoxylon*).

Previously, in 1974, the Conservation Through Reserves Committee recommended that a fairly substantial area of the Whicher Range be declared a Class A Reserve for the conservation of flora and fauna, to be vested in the W.A. Wildlife Authority (see Fig. 1). The Forests Department in its *Statement of Intent* designated a rather smaller area as a Forest Reserve for Recreation, Catchment and Flora. Finally Cabinet accepted the recommendation made by the Environmental Protection Authority in 1976 to make the area a "Forest Park", primarily for recreation and for flora and fauna conservation, under the control of the Conservator of Forests.

Method of survey:

The birds were recorded during walks into the centre of the Whicher block, along the Sabina River, and at various places along Sabina, Jalbaragup and Hill Roads (within the Whicher Range Reserve in the morning, and "elsewhere" in the afternoon). An attempt was made to survey the flora on a systematic grid basis. Groups of people drove to different areas, then collected all species around their stopping places for 15 minutes. A comparison of the different collections should give an overall picture of the flora. Unfortunately the grid system proved not as complete as hoped, for members found the amount of work involved, in the time available, rather daunting. Nevertheless the results did not lack interest.

Results:

Birds (Appendix I). The results can scarcely be considered as having any real significance. But the species recorded may suggest which are the conspicuous birds of the area. Furthermore, as three of the 37 species noted, namely the Red-tipped Pardalote, the Horsfield Bronze Cuckoo and the Hooded Robin, had been overlooked in the surveys of the Forests Department (as recorded in the appendices of the *Statement of Intent*) it may be assumed that the avifauna of the Reserve may prove to be fairly considerable when adequate surveys are made. The low number of species noted outside of the designated Reserve area may be due to the fact that the walks were made in the afternoon.

Plants (Appendix II). A total of 200 species were collected, 71 of which had not been recorded in the *Statement of Intent*. Of this total 78% occur within the Whicher Range Reserve. The most important of those






-  Original CTRC recommendation 1974
-  Forests Dept. Statement of Intent 1975
-  EPA recommendation to Cabinet 1976

Fig. 1.—Map of Whicher Range Area
 (redrawn from Conservation Through Reserves Committee Report, 1974)

that do not occur within the reserve are associated with swamps, e.g. *Stirlingia latifolia*, which had not been previously recorded as far west, and isolated populations of *Xyris* sp., and *Dasyogon hookeri*.

The Whicher Range also has a number of plants that show unusual distributions, e.g. *Dryandra fornosa* and *Conospermum acerosum*, which are more common further east, and on the northern sandheaths, respectively. In addition the Range has a number of possible endemics including *Grevillea brachystylis*, *Synaphea favosa* and a large-flowered *Darwinia* sp. In fact all three *Darwinia* spp. found were of interest, as *D. citriodora* and *D. vestita* are atypical variants. The *Synaphea* population also shows intermediate characteristics and may prove to contain a new species. A white-flowered *Andersonia* and a *Calothamnus* found near the Sabina River also appear to be undescribed species.

CONCLUSIONS

The Whicher Range is an important and significant area and should remain reserved for flora and fauna conservation. Elsewhere along the northern section of the Sunklands there is little of natural significance except for the Margaret River swamps. If pine planting should take place in that region care should be taken to avoid disruption of the swamps, either by direct disturbance or by increasing erosion and so turbidity of the water and siltation of the swampland.

ACKNOWLEDGEMENTS

I thank the staff of the Western Australian Herbarium for their assistance with the identification of specimens.

APPENDIX I

BIRDS

(Recorded by Arthur Fewster, John Hutchinson and M. T. Millard)

| | noted within Whicher Range | EPA reserve | noted elsewhere |
|-----------------------------|-------------------------------|----------------|--------------------|
| Wedge-tailed Eagle | x | | |
| White-tailed Black Cockatoo | x | | |
| Red-capped Parrot | x | | |
| Twenty-eight Parrot | x | | |
| Elegant Parrot | x | | |
| Fan-tailed Cuckoo | x | | |
| Kookaburra | x | | |
| Sacred Kingfisher | x | | |
| Bee-eater | x | | |
| Tree-Martin | x | | x |
| Splendid Wren | x | | |
| Red-winged Wren | x | | |
| Western Warbler | x | | x |
| Brood-tailed Thornbill | x | | |
| Spotted Scrub-Wren | x | | |
| Weebill | x | | x |
| Scarlet Robin | x | | |
| Yellow Robin | x | | |
| White-breasted Robin | x | | |
| Grey Fantail | x | | x |
| Willy Wagtail | x | | |
| Golden Whistler | x | | |
| Western Shrike-Thrush | x | | |
| Spotted Pardalote | x | | |
| White-naped Honeyeater | x | | |
| Spinebill | x | | x |
| Little Wattle-bird | x | | |
| Squeaker | x | | |
| Western Magpie | x | | |
| Raven | x | | |
| Dusky Wood-swallow | x | | x |
| Rufous Tree-creeper | x | | |
| Pallid Cuckoo | x | | |
| New Holland Honeyeater | x | | |
| Red-tipped Pardalote | x | | |
| Horsfield Cuckoo | x | | |
| Hooded Robin (female) | x | | |

* denotes birds not previously recorded in the Statement of Intent as occurring in the area.

APPENDIX II

PLANTS

(In this list of plants collected the nomenclature follows *West Australian Plants*, ed. J. S. Beard, 2nd edn., 1970)

| Name | collected within EPA | | collected outside EPA | |
|--|----------------------|---------|-----------------------|---------|
| | Whicher Range | Reserve | Whicher Range | Reserve |
| GYMNOSPERMAE | | | | |
| CYCADACEAE | | | | |
| <i>Macrozamia reidlei</i> , Zamia | | x | | x |
| PODOCARPACEAE | | | | |
| <i>Podocarpus drouynianus</i> , Native plum | | x | | x |
| ANGIOSPERMAE—MONOCOTYLEDONEAE | | | | |
| CYPERACEAE | | | | |
| <i>Lepidosperma angustatum</i> | | x | | x |
| <i>Mesomelaena tetragona</i> | | x | | x |
| RESTIONACEAE | | | | |
| <i>Loxocarya flexuosa</i> | | x | | x |
| XYRIDACEAE | | | | |
| * <i>Xyris</i> sp. | | | | x |
| LILIACEAE | | | | |
| * <i>Burchardia umbellata</i> , Milkmaids | | x | | x |
| <i>Johnsonia lupulina</i> , Hooded lily | | x | | x |
| <i>Thysanotus multiflorus</i> , Fringe lily | | x | | |
| * <i>T. thrysoideus</i> , Fringe lily | | | | x |
| XANTHORRHOACEAE | | | | |
| <i>Dasyogon bromeliifolius</i> | | x | | x |
| <i>D. hookeri</i> | | x | | x |
| <i>Kingia australis</i> , Black gin | | x | | |
| <i>Lomandra</i> sp. | | x | | |
| <i>Xanthorrhoea gracilis</i> , Blackboy | | x | | |
| <i>X. preissii</i> , Blackboy | | x | | |
| HAEMODORACEAE | | | | |
| <i>Conostylis</i> spp. | | x | | x |
| IRIDACEAE | | | | |
| * <i>Orthrosanthus laxus</i> , Morning iris | | x | | |
| <i>Patersonia occidentalis</i> | | x | | x |
| <i>P. umbrosa</i> | | x | | |
| <i>P. xanthina</i> , Yellow flag | | x | | x |
| ORCHIDACEAE | | | | |
| * <i>Caladenia deformis</i> , Blue fairy orchid | | x | | x |
| * <i>C. dilatata</i> , Green spider orchid | | | | x |
| * <i>C. flava</i> , Cowslip orchid | | x | | |
| * <i>C. latifolia</i> , Pink fairy orchid | | x | | |
| * <i>C. patersonii</i> , White spider orchid | | x | | |
| * <i>C. nana</i> , Pink fan orchid | | x | | |
| * <i>Diuris purdiei</i> , Donkey orchid | | x | | |
| * <i>Elythranthera brunonis</i> , Purple enamel orchid | | | | x |
| * <i>E. emarginata</i> , Pink enamel orchid | | x | | |
| * <i>Lyperanthus nigricans</i> , Elephant's tongues | | x | | |
| * <i>L. serratus</i> , Rattle Beak orchid | | x | | |
| * <i>Pterostylis recurva</i> , Jug orchid | | x | | |
| * <i>P. vittata</i> , Greenhood orchid | | x | | |
| * <i>Thelymitra antennifera</i> , Lemon orchid | | | | x |
| * <i>T. crinata</i> , Blue lady orchid | | x | | |
| ANGIOSPERMAE—DICOTYLEDONEAE | | | | |
| CASUARINACEAE | | | | |
| <i>Casuarina drummondiana</i> | | x | | |
| <i>C. fraseriana</i> , Shooak | | | | x |
| <i>C. humilis</i> , Dwarf sheoak | | x | | |
| PROTEACEAE | | | | |
| <i>Adenanthos barbigerus</i> , Stick-in-jug | | x | | x |
| <i>A. meisneri</i> | | x | | x |
| <i>A. obovata</i> , Stick-in-jug | | x | | x |
| <i>Banksia attenuata</i> , Candlestick Banksia | | x | | x |
| <i>B. grandis</i> , Bull Banksia | | x | | x |
| <i>B. ilicifolia</i> , Holly leaved Banksia | | | | x |
| <i>B. sphaerocarpa</i> , Round fruited Banksia | | x | | x |
| <i>Conospermum acerosum</i> , Needle-leaved Smokabush | | x | | |
| <i>C. caeruleum</i> | | | | x |
| <i>C. flexuosum</i> | | x | | x |
| <i>C. teretifolium</i> | | | | x |
| <i>Dryandra bipinnatifida</i> | | x | | |
| * <i>D. formosa</i> | | x | | |
| <i>D. nivea</i> , Shaving-brush <i>Dryandra</i> | | x | | x |
| <i>Grevillea brachystylis</i> | | x | | |
| * <i>G. leptobotrya</i> | | x | | x |
| * <i>G. manglesioides</i> | | x | | |
| * <i>G. quercifolia</i> | | x | | x |
| <i>Hakea ambigua</i> | | x | | |
| * <i>H. amplexicaulis</i> , Prickly Hakea | | x | | x |
| <i>H. ceratophylla</i> , Horned-leaf Hakea | | x | | |
| <i>H. cyclocarpa</i> , Curved-fruit Hakea | | x | | |
| <i>H. lasiantha</i> , Woolly-flowered Hakea | | x | | |
| <i>H. ruscifolia</i> , Candle Hakea | | x | | x |

| | | |
|--|---|---|
| <i>Isopogon sphaerocephalus</i> , Drumsticks | x | x |
| <i>Persoonia elliptica</i> , Snooty-goggle | x | x |
| <i>P. longifolia</i> , Red Paperbark | x | x |
| <i>Petrophile diversifolia</i> | x | x |
| <i>P. linearis</i> | x | x |
| <i>P. serruriae</i> | x | x |
| <i>P. squamata</i> | x | |
| * <i>P. striata</i> | x | |
| <i>Stirlingia latifolia</i> , Bluebush | x | x |
| * <i>S. teretifolia</i> | | x |
| <i>Synaphea favosa</i> | x | |
| * <i>S. petiolaris</i> | x | x |
| <i>S. preissii</i> | x | x |
| * <i>S. sp. nov.</i> | x | |
| <i>Xylomelum occidentale</i> , Forest pear | x | x |
| SANTALACEAE | | |
| * <i>Loptomeria cunninghamii</i> | | x |
| LORANTHACEAE | | |
| <i>Nuytsia floribunda</i> , W.A. Christmas tree | x | x |
| RANUNCULACEAE | | |
| * <i>Clematis aristata</i> , Traveller's Joy | x | |
| DROSERACEAE | | |
| * <i>Drosera gigantea</i> , Giant sundew | | x |
| * <i>D. spp.</i> | | x |
| PITTOSPORACEAE | | |
| * <i>Billardiera variifolia</i> | | x |
| * <i>Marianthus candidus</i> | | x |
| MIMOSACEAE | | |
| <i>Acacia alata</i> | x | x |
| <i>A. divorgens</i> | | x |
| <i>A. drummondii</i> | | x |
| <i>A. ? extensa</i> | | x |
| <i>A. gilbertii</i> | | x |
| <i>A. pulchella</i> , Prickly Moses | x | x |
| CAESALPINIACEAE | | |
| <i>Labichoa punctata</i> | x | |
| FABACEAE | | |
| <i>Aotus villosa</i> | | x |
| <i>Bossiaea ornata</i> | | x |
| * <i>Chorizoma diversifolium</i> , Twining flame-pea | x | |
| <i>Daviesia alternifolia</i> | x | |
| * <i>D. polyphylla</i> | x | |
| * <i>D. cordata</i> , Book-leaf bitter-pea | x | x |
| <i>D. quadrilatera</i> | x | |
| <i>Dillwynia uncinata</i> , Silky parrot-pea | x | |
| <i>Gompholobium burtonioides</i> | x | |
| * <i>G. knightianum</i> | x | x |
| <i>G. ovatum</i> | x | x |
| * <i>G. tomentosum</i> | x | |
| <i>G. venustum</i> , Handsome Wedge-pea | x | |
| <i>Hovea elliptica</i> | x | x |
| <i>H. trisporma</i> | x | x |
| <i>Kennedia coccinea</i> , Coral vine | x | x |
| <i>K. stirlingii</i> | x | |
| * <i>Melilotus indica</i> , Melilot | x | |
| <i>Mirbella dilatata</i> | x | |
| <i>Pultenaea andrewsii</i> | | x |
| <i>Sphaerolobium macranthum</i> | x | x |
| * <i>S. medium</i> | | x |
| * <i>S. racemosum</i> | | x |
| * <i>S. vimineum</i> | x | |
| RUTACEAE | | |
| <i>Boronia crenulata</i> | x | |
| * <i>B. spathulata</i> | x | x |
| * <i>B. ? tornata</i> | | x |
| <i>Crowea angustifolia</i> | x | x |
| <i>Eriostemon spicatus</i> , Popper and salt | x | x |
| TREMADRACEAE | | |
| * <i>Platytheca verticillata</i> | x | x |
| <i>Tetratheca satigera</i> | x | x |
| POLYGALACEAE | | |
| * <i>Comesporma scoparium</i> , Broom milkwort | | x |
| <i>C. virgatum</i> | | x |
| * <i>C. volubilis</i> , Love creeper | x | |
| EUPHORBIACEAE | | |
| * <i>Phyllanthus calycinus</i> , False Boronia | x | |
| * <i>Poranthera sp.</i> | x | x |
| STACKHOUSIACEAE | | |
| * <i>Stackhousia brunonis</i> | | x |
| <i>S. huegalii</i> | x | x |
| RHAMNACEAE | | |
| <i>Trymallum ledifolium</i> | x | |
| STERCULIACEAE | | |
| * <i>Lasiopetalum acutiflorum</i> | | x |
| <i>Thomasia grandiflora</i> | x | x |

| | | |
|--|---|---|
| DILLENIACEAE | | |
| * <i>Hibbertia lasiopus</i> | | X |
| <i>H. hypericoides</i> | X | X |
| <i>H. perfoliata</i> | X | X |
| <i>H. vaginata</i> | | X |
| <i>H. sp. nov.</i> | X | X |
| VIOLACEAE | | |
| <i>Hybanthus iloribundus</i> | X | |
| THYMELAEACEAE | | |
| <i>Pimelea rosea</i> , Pink Banjine | X | X |
| <i>P. spectabilis</i> | X | X |
| <i>P. suaveolens</i> | | X |
| MYRTACEAE | | |
| <i>Agonis parviceps</i> | X | X |
| <i>Beaufortia sparsa</i> | | X |
| * <i>Calothamnus gracilis</i> | | X |
| <i>C. sanguineus</i> , One-sided Bottlebrush | X | X |
| <i>C. sp. nov.</i> | X | |
| * <i>Calytrix flavescens</i> , Yellow star-flower | | X |
| <i>C. variabilis</i> | | X |
| * <i>Darwinia citriodora</i> , Lemon-scented myrtle | X | |
| <i>D. vestita</i> | X | |
| <i>D. sp. nov.</i> | X | |
| <i>Eucalyptus calophylla</i> , Marri | X | X |
| <i>E. haematoxylon</i> , Mountain Marri | X | X |
| <i>E. marginata</i> , Jarrah | X | X |
| <i>Hypocalymma angustifolium</i> , White myrtle | X | X |
| <i>H. robustum</i> , Swan Rivor myrtle | X | |
| <i>Kunzea recurva</i> | X | X |
| <i>Leptospermum ellipticum</i> | X | X |
| <i>L. fitmum</i> | | X |
| <i>Melaleuca sp.</i> | X | X |
| HALORAGACEAE | | |
| <i>Glischrocaryon aureum</i> , Pop flower | X | X |
| APIACEAE | | |
| <i>Platysace compressa</i> | X | |
| * <i>P. tenuissima</i> | | X |
| * <i>Trachymone pilosa</i> | X | |
| EPACRIDACEAE | | |
| <i>Andersonia caerulea</i> | X | X |
| <i>A. longifolia</i> | X | |
| <i>A. sp. nov.</i> | X | |
| <i>Astroloma epacris</i> | X | |
| <i>Conostephium pendulum</i> , Pearl flower | X | X |
| <i>Leucopogon australis</i> | X | X |
| <i>L. parviflorus</i> | | X |
| <i>L. verticillatus</i> , Tassel shrub | X | X |
| <i>L. sp.</i> | X | |
| <i>Lysinema ciliatum</i> , Curry plant | X | |
| <i>Sphenotoma capitatum</i> | | X |
| LOGANIACEAE | | |
| * <i>Logania campanulata</i> | X | |
| <i>Mitrasacme paradoxa</i> | | X |
| DICRASTYLIDACEAE | | |
| <i>Pityrodia bartlingii</i> , Woolly dragon | X | |
| LENTIBULARIACEAE | | |
| * <i>Polypompholyx multilida</i> | | X |
| LOBELIACEAE | | |
| * <i>Lobelia sp.</i> | X | |
| GOODENIACEAE | | |
| <i>Dampiera cuneata</i> | X | X |
| <i>D. sacculata</i> | | X |
| <i>Goodenia caerulea</i> | X | |
| <i>Leschenaultia biloba</i> , Blue Leschenaultia | X | X |
| <i>Scaevola striata</i> | X | |
| <i>Velleia trinervis</i> | X | |
| STYLIDIACEAE | | |
| * <i>Levenhookia pusilla</i> , Midget Stylewort | X | |
| * <i>Stylidium caespitosum</i> | X | |
| * <i>S. calcaratum</i> , Ballerina triggerplant | X | X |
| * <i>S. sp. aff. dichotomum</i> | X | |
| * <i>S. glaucum</i> | X | |
| * <i>S. repens</i> | X | |
| <i>S. scandens</i> , Climbing triggerplant | | X |
| * <i>S. schoenoides</i> , Cowkicks | X | X |
| ASTERACEAE | | |
| * <i>Craspedia uniflora</i> , Billy buttons | X | |
| * <i>Cryptostemma caligula</i> , Capweed | X | |
| <i>Helichrysum bracteatum</i> | X | X |
| * <i>Hypochoeris radicata</i> , Flatweed | X | |
| <i>Lagenophora stipitata</i> | X | |
| * denotes plant not included in Appendix II, List of Plant Species, in Forests Department Statement of Intent, 1975. | | |

—B. M. J. HUSSEY